

CLAIMS

1. Adhesive composition comprising a formaldehyde-containing aminoplast resin and a catalysing compound, characterised in that the catalysing compound is an acid or is able to release an acid with a pKa lower than 6, under the proviso that the catalysing compound comprises at most 11 wt.% of an ammonium salt, and in that the formaldehyde-containing aminoplast resin has a F/(NH<sub>2</sub>)<sub>2</sub> ratio which is lower than or equal to 1.
2. Adhesive composition according to claim 1, characterised in that the catalysing compound is an acid or is able to release an acid with a pKa lower than 5.
3. Adhesive composition according to claim 1, characterised in that the catalysing compound is a monoacid or a methyl ester, melamine salt or urea salt of one or more monoacids with a pKa lower than 4 or a methylolated urea or melamine compound esterified with one or more monoacids with a pKa lower than 4.
4. Adhesive composition according to claim 3, characterised in that the catalysing compound is formic acid or a methyl ester, melamine salt or urea salt of formic acid or a methylolated urea or melamine compound esterified with formic acid.
5. Adhesive composition according to claim 4, characterised in that the catalysing compound is formic acid.
6. Adhesive composition according to claim 1, characterised in that the catalysing compound is acetic acid.
7. Adhesive composition according to any one of claims 1-6, characterised in that the pH of the adhesive composition is lower than or equal to 7.
8. Adhesive composition according to claim 7, characterised in that the pH of the adhesive composition is 6.5-5.5.
9. Process for the preparation of a board material by mixing cellulose-containing compounds with the adhesive composition according to one of claims 1-8 and curing the same.
10. Board material obtainable according to claim 9.
11. Board material according to claim 10 whose formaldehyde potential according to DIN NEN 120 is lower than 8 mg/100 g.
12. Board material according to claim 11 whose formaldehyde potential according

to DIN NEN 120 is lower than 6.5 mg/100 g.

13. Board material according to any one of claims 10-12 whose internal bond strength complies with the specification stated in EN 312-5 for load-bearing board material for use in damp conditions measured according to NEN-EN 1087-1 (V100).  
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14. Process for the preparation of a plywood board material comprising the application of an adhesive composition which is cured, characterised in that an adhesive composition according to any one of claims 1-8 is applied, with the formaldehyde-containing aminoplast resin possessing a  $F/(NH_2)_2$  ratio lower than 1.2.  
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15. Plywood material obtainable according to the process of claim 14.
16. Plywood material according to claim 15 whose tensile strength according to the JAS is at least 7 kg/cm<sup>2</sup>.
17. Plywood material according to claim 15 or 16 whose formaldehyde emission according to the JAS is not more than 0.3 mg/100 ml of water.  
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